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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/591,404

09/01/2006

Toshifumi Hashiba

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EXAMINER

TESKIN, FRED M

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,404	Applicant(s) HASHIBA ET AL.	
	Examiner Fred M. Teskin	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060901; 20070208</u> . | 6) <input type="checkbox"/> Other: ____. |

This Office action is responsive to application filed on 01 September 2006. The accompanying preliminary amendment having been entered, claims 1-9 are currently pending and under examination herein.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7 of copending Application

Art Unit: 1796

No. 11/512,230. Although the conflicting claims are not identical, they are not patentably distinct from each other because they differ merely in matters of scope. More specifically, the conflicting claims are drawn to the same basic product (oval-spherical organic polymer particle) and recite identical limitations of aspect ratio and ionic functional group and overlapping ranges for length of major axis L_1 . Furthermore, the "first" and "second" organic monomers called for in copending claim 1 are identically recited in applicants' claim 6 as reactants in producing the mutually claimed particle; and the "solvent mixture" defined in copending claims 5-7 is embraced by the "solution polymerizing" conditions recited in applicants' method claims. As such, no patentable distinction is discernible between the invention as claimed herein and in the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 5026800 (Kimura).

Claimed invention is an oval-spherical organic polymer particle having a single continuous curved surface, which particle is characterized by:

bearing an ionic functional group, and

having an aspect ratio P_1 , calculated by the formula $P_1 = L_1/D_1$, wherein L_1 is the major axis and D_1 is the minor axis of a projected two-dimensional image obtained by shining light onto the particle from a direction orthogonal to the long axis of the particle, that satisfies the relationship $P_1 \geq 1.8$.

Kimura discloses substantially the same particle as claimed, but does not state that the disclosed range of 1.5 ~ 20 (see col. 5, lines 43-65) for the corresponding ratio between average length and average breadth of the particle is obtained by shining light onto the particle from a direction orthogonal to the long axis of the particle. In particular, Kimura describes that, in a method for producing a water-absorbing resin, in which a water-soluble ethylenically unsaturated monomer solution is dispersed and suspended by use of a dispersing agent in a hydrophobic organic solvent and is polymerized with a radical polymerization initiator, when the viscosity of the aforesaid solution is adjusted in a range of 5,000 to 1,000,000 cps, a polymer powder having a non-spherical shape without any angle - e.g., a sausage-like shape - is obtained, wherein the average diameter is in the range of 100 ~ 600 μm (*cf.*, claim 2) and the ratio of the average major axis to the average minor axis is in a range of 1.5:1 to 20:1 (col. 3, lines 5-11 and 36-50). In addition, Kimura describes a surface crosslinking treatment (col. 7, lines 49-

60) and provides extensive disclosure of anionic-functional monomers (col. 3, lines 50+), which indicate the disclosed polymer powder bears an ionic functional group, as claimed. Moreover, it is noted that in Kimura Examples 8 and 9, specific species of monomers having anionic and metallic cation functionalities (sodium acrylate and acrylic acid, per claims 3-5) are polymerized at an aqueous monomer concentration of 35 weight % (per claim 7) to obtain polymer powders. In Example 8, the polymer powder is characterized by an average length of 3000 μm and an average breadth of 550 μm , giving a ratio of 5.45. In Example 9, the reported values for average length and average breadth of the polymer powder equate to a ratio of 5.3. This indicates the disclosed polymer powder has a ratio of major axis to minor axis in compliance with the claimed relationship, although not measured in the manner specified in claim 1. Nevertheless, since Kimura teaches the same polymer powder producing method as here claimed (*cf.*, claims 6-9), a presumption arises that, *prima facie*, the products described in the reference examples intrinsically possess an aspect ratio that satisfies the applicants' claimed relationship. Where, as here, the claimed and prior art products are identical or substantially identical, or are *produced by identical or substantially identical processes*, a *prima facie* case of either anticipation or obviousness is established. *In re Best*, 195 USPQ 430, 433 (CCPA 1977). When there is sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not. *In re Spada*, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. Clough is cited as pertinent to organic polymer particles having a non-spherical geometry and an aspect ratio greater than one (note col. 2, lines 16+).

No claims are in condition for allowance at this time.

Any inquiry concerning this communication should be directed to Examiner F. M. Teskin whose telephone number is (571) 272-1116. The examiner can normally be reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Fred M Teskin/

Primary Examiner, Art Unit 1796